

APPENDIX D

EXCAVATION AND SOIL MANAGEMENT PLAN

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**FORMER GEORGIA-PACIFIC CALIFORNIA WOOD PRODUCTS
MANUFACTURING FACILITY
90 WEST REDWOOD AVENUE
FORT BRAGG, CALIFORNIA
AME PROJECT NO. 16017.01**

March 21, 2005

Prepared By

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1.0 INTRODUCTION

Georgia-Pacific Corporation (G-P) authorized the preparation of this Excavation and Soil Management Plan which describes the procedures to be followed during implementation of foundation removal, additional investigation and interim remedial measure (IRM) activities at the former Georgia-Pacific California Wood Products Manufacturing Facility (GPCWPMF) at 90 West Redwood Avenue in Fort Bragg, California (site, Figure D-1). Remedial activities are described in the Work Plan for Foundation Removal, Additional Investigation and Interim Remedial Measures (Work Plan, Acton • Mickelson • Environmental, Inc., 2005). Georgia-Pacific Corporation ceased operations at the site in August 2002. Environmental investigations conducted since 2003 indicate soil and ground water underlying the site to be impacted by petroleum constituents, volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), metals, polychlorinated biphenyls (PCBs), and organochlorine pesticides.

The scope of work addresses 11 areas containing building structures, three beach areas, and two areas of geophysical anomalies. The scope of work will also address foundation removal and excavation of impacted soil, if applicable, at approximately 29 building structures. Upon removal of the foundations, environmentally impaired soil will be identified, excavated, and removed as an IRM, if warranted. Buried debris identified at the three beach areas and two geophysical survey areas will be excavated and removed. The Excavation and Soil Management Plan describes the protocol and procedures to be followed to protect human health and the environment during foundation removal and excavation activities, and fulfills specific applicable requirements of the Mendocino County Air Quality Management District (MCAQMD) and the California State Water Resources Control Board.

Components of the Excavation and Soil Management Plan address mitigation of human health and environmental risks from the potential emissions of petroleum hydrocarbons and VOCs as well as physical hazards resulting from the excavations. All work will be performed in accordance with the Site Health and Safety Plan (HASP, Appendix B to the Work Plan).

2.0 FOUNDATION REMOVAL AND EXCAVATION NOTIFICATIONS

Georgia-Pacific Corporation will provide written notice to the MCAQMD of the intention to remove foundations and excavate a minimum of five days prior to initiation of field activities. The written notice of excavation will include:

- Names and addresses of persons performing and responsible for the excavation work.
- Location of the site at which excavation will occur.
- Scheduled starting date of the excavation. The starting date may be delayed up to five working days provided the MCAQMD is notified by telephone as early as possible prior to the new starting date.
- Quantity of soil to be excavated.
- Estimated average organic content of the excavated soil.
- Procedures to be employed to meet MCAQMD requirements.

The MCAQMD notice will be addressed to:

Air Pollution Control Officer
Mendocino County Air Quality Management District
306 E. Gobbi Street
Ukiah, California 95482

3.0 FOUNDATION REMOVAL AND EXCAVATION PROTOCOL AND PROCEDURES

The Field Team Leader will complete a Hot Work Permit prior to beginning work each day in accordance with the safe work practices work permit guidelines for excavation and hot work. Hot work is defined to include any work using tools or equipment that may create flame or sparks, including heavy construction equipment (e.g., backhoes), motorized equipment, and power and hand tools.

A designated work area boundary shall be established for excavation activities within a building foundation area. Initially, the designated work area boundary will be established at a setback distance of 55 feet from the building foundation. If necessary, during excavation, all exposed contaminated soil surfaces will be kept visibly moist by water spray, treated with an approved vapor suppressant, covered with continuous heavy duty plastic sheeting or other covering to minimize emissions of organic compounds to the atmosphere. Air monitoring will be conducted

in accordance with the HASP at the worker breathing zone, and the work area boundary. The designated work area boundary will be adjusted based on the air monitoring results.

Entry into an excavation is authorized only in accordance with the HASP and the safe work practices confined space entry procedures as specified in an Entry Permit completed by the Field Team Leader. The Entry Permit will specify the confined space monitoring to be performed and the conditions for acceptable entry. Entry is defined as any part of a person's body passing through the plane of the opening of the excavation.

During periods of inactivity longer than 12 hours, trench bottoms and sidewalls may be covered with heavy duty plastic sheeting or other covering to minimize emissions of hydrocarbons to atmosphere. Open excavations will be demarcated with barricades and caution tape during periods of inactivity and at the end of each workday to reduce the potential of personnel falling into the excavations. The excavations will be maintained to mitigate physical hazards to personnel working in or entering the area after work is completed. Excavations at the beach areas near the top of the bluffs will extend down to naturally occurring soils or existing bedrock in an effort to restore the areas to conditions prior to debris placement or as close as practical to this state. If a resulting excavation poses a physical hazard, the sidewalls will be sloped where possible to reduce the potential of someone falling into the excavation.

Excavations made for foundation removal, removal of geophysical anomalies, or IRMs will be graded and/or backfilled with clean imported soil to mitigate physical hazards and to prevent ponding of water during rainfall. As a temporary measure, the excavation sidewalls will be sloped to reduce personnel trip and fall hazards during work in the area. Backfill materials will be obtained from a local borrow source, such as Baxman Gravel Company, Inc. in Fort Bragg, for use at the site. Coarse grained soils with a minor amount of fines to bind the soil are preferred for use as backfill as they are easier to compact and will allow water to more readily drain into surrounding soils. The excavation contractor will utilize compaction equipment suitable for use in the resulting excavations.

Parking areas, staging areas, and traffic pathways on the site shall be cleaned as necessary to control dust emissions. Adjacent public streets shall also be cleaned if necessary when soil material from the site is visible. In addition, excavation activities will be suspended when winds (instantaneous gusts) exceed 25 miles per hour.

4.0 MANAGEMENT OF BROKEN CONCRETE AND EXCAVATED SOIL

Soil stockpiles will be placed on top of and covered with heavy duty plastic sheeting. Wherever possible, broken concrete and excavated soil will be stockpiled on areas with improved asphalt or concrete surface. Potentially hazardous waste will be stored in a Potentially Hazardous Waste Storage Area that will be specifically selected for each investigation area. The location of the Potentially Hazardous Waste Storage Area may change contingent upon the nature and location of field activities. Stockpile covering will be in good condition, joined at the seams, and securely anchored to minimize headspace where vapors may accumulate. When not covered, soil stockpile surfaces will be kept visibly moist by water spray, as necessary.

Soil loaded into transport vehicles for offsite disposal will be covered with continuous heavy duty plastic or other covering to minimize emissions to the atmosphere. The covering will be in good condition, joined at the seams, and securely anchored to minimize headspace where vapors may accumulate. Additional procedures for the offsite transportation of soil generated during the implementation of remedial activities are provided in the Transportation Plan, Appendix E.

The anticipated landfill facilities for disposal of non-hazardous excavated soil are the Potrero Hills Landfill in Suisun City, California and Waste Management, Inc., Redwood Landfill in Novato, California. The anticipated landfill facility for hazardous excavated soil is the Waste Management, Inc. Kettleman Landfill in Kettleman Hills, California. Non-hazardous concrete debris will be transported to Norcal Rock in Willits, California for disposal or recycling.

5.0 BEST MANAGEMENT PRACTICES

Construction Best Management Practices (BMPs) are management practices, operating procedures, or schedules of activities to control, reduce, or prevent discharge of pollutants from construction activities. Excavation and soil and concrete debris handling activities will include the following BMPs:

General

- Material or products will be stored in manufacturer's original containers.
- Where possible storage will be under roof.
- Storage areas will be neat and orderly to facilitate inspection.
- Check all equipment for leaks and repair leaking equipment promptly.
- Perform major maintenance, repairs, and washing of equipment away from the excavation site.
- Designate a completely contained area away from storm drains for refueling and/or maintenance work that must be performed at the site.
- Clean up all spills and leaks using dry methods (absorbent materials/rags).
- Dry sweep dirt from paved surfaces for general cleanup.
- Train employees in using these BMPs.

Concrete Breakout

- Avoid creating excess dust when breaking concrete. Prevent dust from entering waterways.

- Protect storm drains using earth dikes, straw bales, sand bags, absorbent socks, or other controls to divert or trap and filter runoff.
- Shovel or vacuum saw-cut slurry and remove from the site.
- Remove contaminated broken pavement from the site promptly. Do not allow rainfall or runoff to contact contaminated broken concrete.

Excavation

- Schedule excavation work for dry weather periods when possible.
- Protect storm drains using earth dikes, straw bales, sand bags, absorbent socks, or other controls to divert or trap and filter runoff.
- Avoid over-application by water trucks for dust control.
- Cover stockpiles and other construction materials with heavy duty plastic. Protect from rainfall and prevent runoff with temporary roofs or heavy duty plastic and berms.

6.0 REMARKS

This plan represents our professional opinions, which are based in part on information supplied by the client. These opinions are based on currently available information and have been arrived at in accordance with currently accepted hydrogeologic and engineering practices at this time and location. Other than this no warranty is implied or intended. Any reliance on the information contained herein by third parties is at such party's sole risk.

7.0 REFERENCES

- Acton • Mickelson • Environmental, Inc., 2005. Work Plan for Foundation Removal, Additional Investigation, and Interim Remedial Measures, Former Georgia-Pacific California Wood Products Manufacturing Facility, 90 West Redwood Avenue, Fort Bragg, California.
- Acton • Mickelson • Environmental, Inc., 2005. Site Health and Safety Plan, Former Georgia-Pacific California Wood Products Manufacturing Facility, 90 West Redwood Avenue, Fort Bragg, California.
- Acton • Mickelson • Environmental, Inc., 2005. Transportation Plan, Former Georgia-Pacific California Wood Products Manufacturing Facility, 90 West Redwood Avenue, Fort Bragg, California.

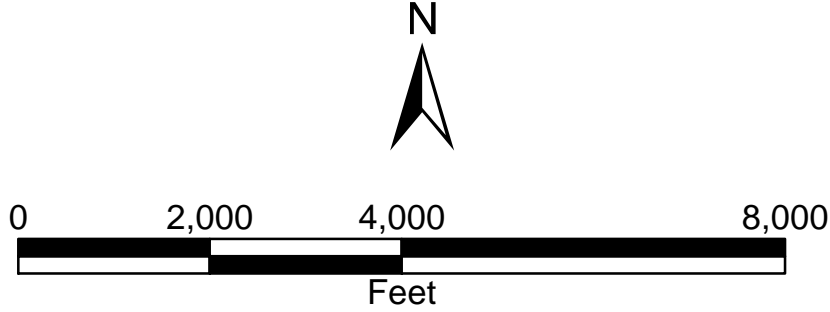
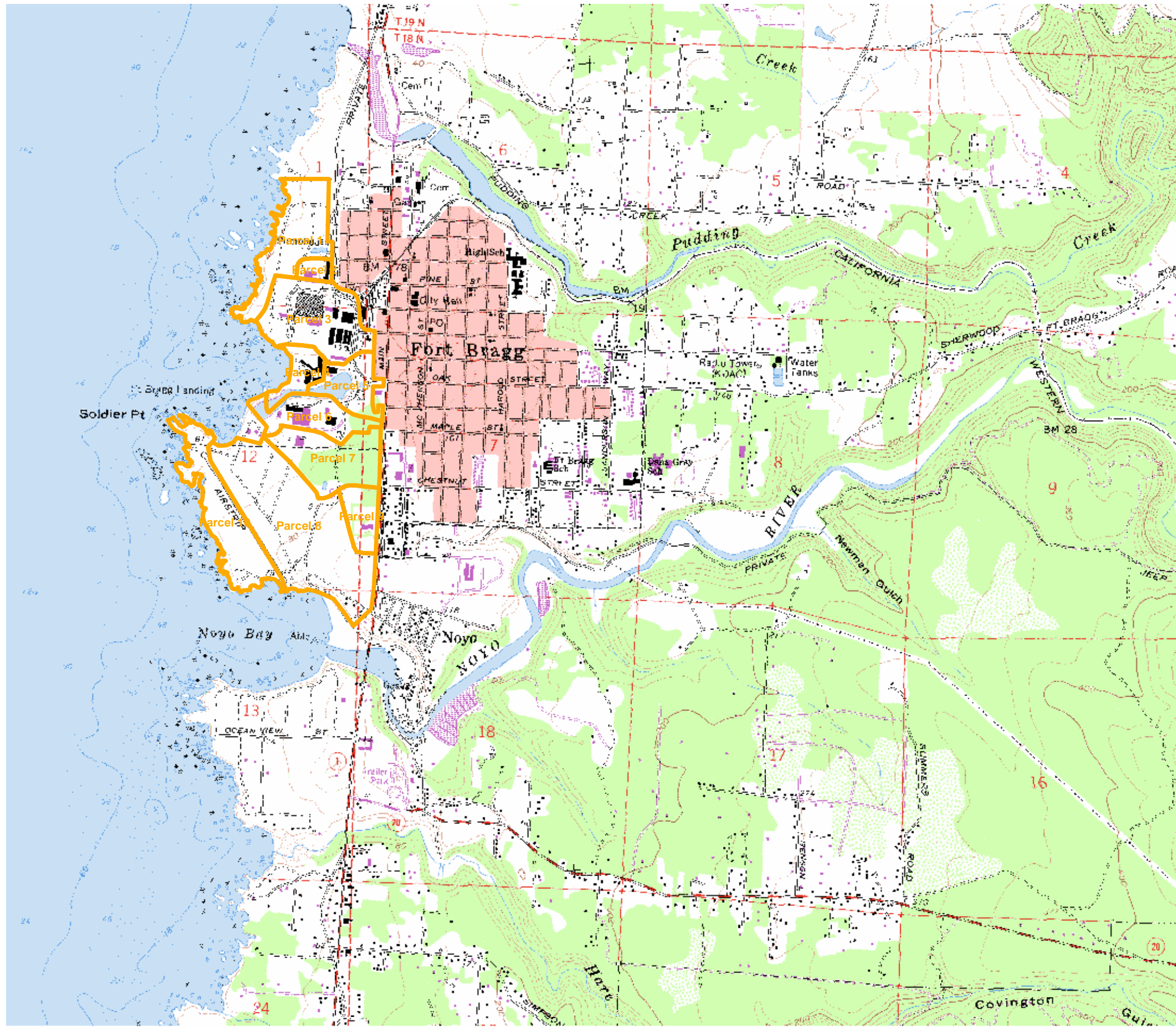


FIGURE D-1		
SITE LOCATION MAP		
Georgia-Pacific California Wood Products Manufacturing Facility 90 West Redwood Avenue, Fort Bragg, California		
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Map File sitelocationmap	Prepared By MAA	
	Reviewed By	
Revision/Date 0 - 3/7/05	Scale As Noted	